



1653

PATENT  
Attorney Docket No.: A-70365-1/RFT/RMS/RMK  
468488-153

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

#6  
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In re application of:

Pierce et al.

Serial No. 09/866,511

Filed: May 24, 2001

For: *Methods and Compositions Utilizing  
Hybrid Exact Rotamer Optimization  
Algorithms for Protein Design*

Examiner: Unknown

Group Art Unit: 1653

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Deborah Dyson

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents  
Washington, DC 20231

Sir:

In satisfaction of the duty of disclosure under 37 C.F.R. § 1.56, and in accordance with the provisions of 37 C.F.R. §§ 1.97 and 1.98, Applicants wish to draw the attention of the U.S. Patent and Trademark Office to the references cited on the accompanying form PTO-1449. Copies of these references are enclosed.

As required by M.P.E.P. §2001.06(b), Applicant notes that the present application is related to the following patent applications:

<u>Application Serial No.</u>	<u>Date Filed</u>
09/058,459	April 10, 1998 (now U.S. Patent No. 6,188,965)
09/127,926	July 31, 1998 (now U.S. Patent No. 6,269,312)
09/714,357	November 15, 2000
09/812,034	March 19, 2001
09/827,960	April 4, 2001
09/837,886	April 18, 2001
10/057,552	January 25, 2002

None of the foregoing references are believed to disclose the invention as claimed.

Nothing herein shall constitute an admission concerning the contents of any of the cited references, nor shall the inclusion of a reference herein be considered an admission that the reference constitutes prior art against the invention claimed in the above-identified application. Submission of the present document shall not be construed as an admission that a search has been made or that better art does not exist.

As far as is known to the undersigned, this Information Disclosure Statement is being filed within three months of the filing date of a national application, within three months of the date of entry of a national stage, or before the mailing date of a first Office Action on the merits as set forth in 37 C.F.R. § 1.97(b), and therefore no fee is required. While no fee is believed to be due, if this belief is in error, the Commissioner is authorized to charge any fees which may be required or credit any overpayment to Deposit Account No. 50-2319 (Our Order No. 468488-153 (A-70365-1/RFT/RMS/RMK)).

Please direct any calls in connection with this application to the undersigned at (415)  
781-1989.

Respectfully submitted,  
DORSEY & WHITNEY LLP

Dated: 11/7/02  
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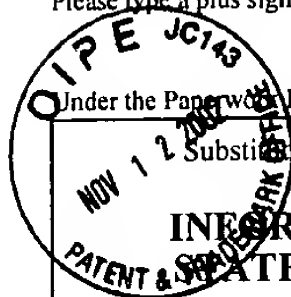
Renee M. Kosslak, Reg. No. 47,717 for  
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Filed under 37 C.F.R. § 1.34(a)

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Sheet	1	of	5	Application Number	09/866,511
				Filing Date	May 24, 2001
				First Named Inventor	Pierce
				Group Art Unit	1653
				Examiner Name	Unknown
				Attorney Docket Number	A-70365-1/RFT/RMS/RMK

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## **U.S. PATENT DOCUMENTS**

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		Number	Kind Code <sup>2</sup> (if known)			
	A1	4,939,666		Hardman, K.D.	07-1990	
	A2	5,241,470		Lee, C. and S. Subbiah	08-1993	
	A3	5,527,681		Holmes, C.P.	06-1996	
	A4	6,188,965		Mayo et al.	02-2001	
	A5	6,269,312		Mayo et al.	07-2001	
	A6	6,403,312		Dahiyat et al.	06-2002	

## **FOREIGN PATENT DOCUMENTS**

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	B1	WO	95/22625	A1		08-1995		
	B2	WO	98/32845	A1		07-1998		
	B3	WO	98/47089	A1		10-1998		
	B4	WO	00/23564	A2		04-2000		
	B5	WO	00/68396	A3		11-2000		
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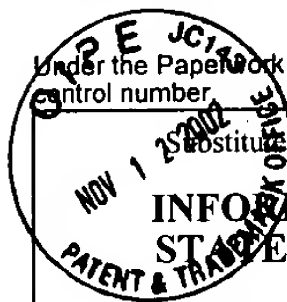
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				Filing Date	May 24, 2001
				First Named Inventor	Pierce
				Group Art Unit	1653
				Examiner Name	Unknown
				Attorney Docket Number	A-70365-1/RFT/RMS/RMK

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Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	C1	Betz S.F., et al., "Controlling topology and native-like behavior of de novo-designed peptides: design and characterization of antiparallel four-stranded coiled coils," <i>Biochemistry</i> 1996 May 28;35(21):6955-62.	
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	C6	Brooks et al., "CHARMM: A Program for Macromolecular Energy, Minimization, and Dynamics Calculations," <i>J. of Computational Chemistry</i> , 4(2):187-217 (1983).	
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	C11	Dahiyat, B.I., et al., "Protein Design Automation," Meeting Abstract; <i>Protein Science</i> vol. 4, Suppl. 2, 83 (1995)	
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				Application Number	09/866,511
				Filing Date	May 24, 2001
				First Named Inventor	Pierce
				Group Art Unit	1653
				Examiner Name	Unknown
Sheet	3	of	5	Attorney Docket Number	A-70365-1/RFT/RMS/RMK

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	C19	DeGrado et al. "Protein design, a minimalist approach" Science 1989 Feb 3;243(4891):622-8.	
	C20	Desjarlais, J.R., et al., "De novo design of the hydrophobic cores of proteins", Protein Science 4:2006-2018 (1995)	
	C21	Desjarlais, J.R., et al., "New strategies in protein design," Current Opinion in Biotechnology 460-466 (1995)	
	C22	Desmet, J., et al., "The Dead End Elimination' Theorem: A New Approach to the Side Chain Packing Protein", from "The Protein Folding Problem and Tertiary Structure Prediction" Ch.10: 1-49 (1994).	
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		Filing Date	May 24, 2001
		First Named Inventor	Pierce
		Group Art Unit	1653
		Examiner Name	Unknown
Sheet 4 of 5	Attorney Docket Number	A-70365-1/RFT/RMS/RMK	

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	C60	Pessi A., et al. "A designed metal-binding protein with a novel fold" Nature 1993 Mar 25;362(6418):367-9.	
	C61	Pomerantz et al. "Structure-based design of transcription factors" Science 1995 Jan 6;267(5194):93-6.	
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